

this species gathered during the summer of 1897 at Apalachicola, Florida.

HYDROCOTYLE BONARIENSIS Lam. Encycl. 3: 153. 1788.—Another station in the United States for this fugitive may be added, the species being abundantly and thoroughly established in the vicinity of the ballast dumps at Wilmington, N. C., where it was collected in fruit and flower, July 2, 1897.

CAREX LAXICULMIS Schwein. Ann. Lyc. N. Y. 1: 70. 1824.—On May 13, 1898, in Henderson county, North Carolina, *C. laxiculmis* was found with nearly mature perigynia. I believe this is the first record of the species as belonging to the southern flora.—C. D. BEADLE, *Biltmore Herbarium*.

A NEW SPECIES OF APIOS FROM KENTUCKY.

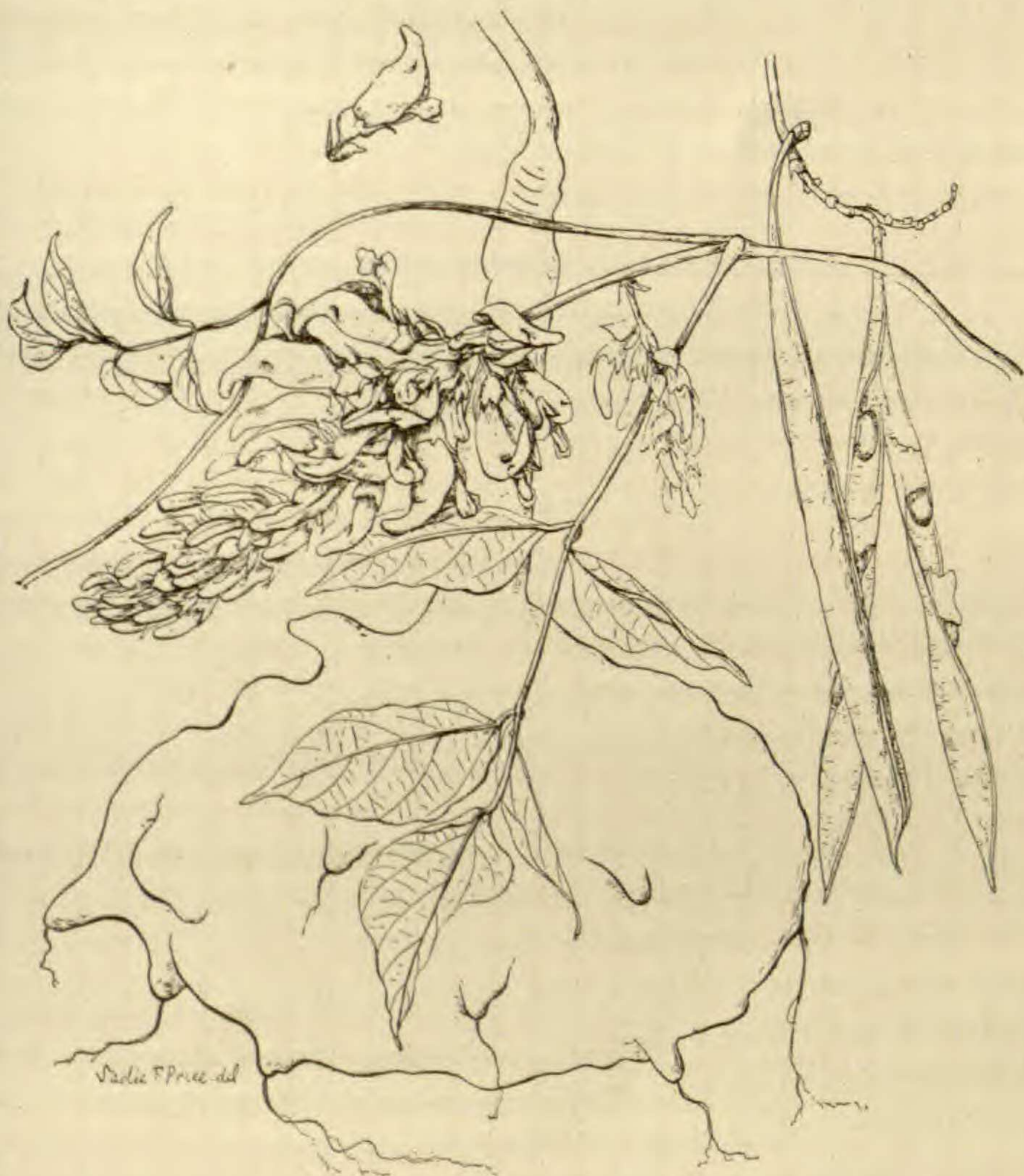
THE plant here characterized was discovered some years ago in open woods and thickets near Bowling Green, Kentucky, by Miss Sadie F. Price. After noticing for several seasons its occurrence and peculiar characters, Miss Price, who recognized its genus and believed it a new species, sent it to Professor Charles F. Wheeler of Michigan Agricultural College for further examination. Professor Wheeler, after making dissections and comparisons, concurred in the view that it represented an undescribed *Apios*, but with undue modesty has declined to characterize it, and Miss Price has recently referred flowering and fruiting specimens, together with careful drawings, to the writer. The species for several reasons possesses more than ordinary interest. It is a second American member of a small but well-known genus. Like its congeners it has farinaceous tuberiform roots, but these attain much more considerable proportions and suggest a possible utility in cultivation. Furthermore, the corolla has a somewhat peculiar form, the standard being provided at the apex with a thick, spongy, knot-like prolongation. Any homologue of this appendage which may exist in the other known species is so rudimentary, if present at all, that its occurrence here seems to warrant the separation of this species as a subgenus. The genus may thus be divided into two subgenera as follows:

EUAPIOS. Standard suborbicular, rounded or retuse at the unthickened summit. Roots (as far as known) fibrous or moniliform-tuberous.

—Including *A. tuberosa* Moench of Atlantic North America, and *A. macrantha* Oliv., *A. carnea* Benth., and *A. Fortunei* Maxim. of Asia.

TYLOSEMIUM. Standard produced at the apex into a thickened spongy appendage. Root apparently single, irregularly spheroidal, and of great size.—Name from *τύλος*, lump, and *σημείον*, vexillum.—A single species, described below, which, notwithstanding the differences indicated, is obviously congeneric with the other species just enumerated under EUAPIOS.

A. Priceana, n. sp.—Vigorous herbaceous twiner: stem terete, slightly striate, at first covered with a fine reflexed pubescence, but



soon nearly glabrate, arising from a large oblate spheroidal root (18^{cm} in diameter): leaves 3-9-foliolate; those of the main stem 24^{cm} long, the ovate or ovate-lanceolate acuminate leaflets sparingly pubescent upon

both surfaces, green and scarcely paler beneath, thin and rather veiny, obtuse or rounded at the base, 4 to 10^{cm} long, half as broad; petiolules hirsutulous; leaves and leaflets of the branches considerably smaller; stipules subulate, pubescent, 6^{mm} long: racemes dense, borne mostly by twos and threes in the axils, those of the main stem often 12 to 15^{cm} long, 50-70-flowered and mostly bearing a single short branch; rameal inflorescences smaller and simple; floral axes thickish; pedicels slender, 5^{mm} long, commonly borne by twos and threes in the axils of ovate caudate-acuminate bracts of somewhat greater length: calyx hemispherical, roseate; the limb obliquely sub-truncate except for the linear-attenuate anterior tooth: petals greenish white tinged especially toward the end with rose-purple or magenta; the vexillum suborbicular, 25^{mm} long, bi-auriculate at the base and bluntly cornute at the apex; wings somewhat shorter, narrowly oblong, a little broadened and rounded at the apex: essential organs of the genus: pods clustered, 12 to 15^{cm} long, 1^{cm} broad, acuminate at the apex, attenuate at the base, about 10-seeded; seeds oblong, olive green, 8^{mm} long, separated in the pod by bi-concave sections of the silvery white pithy endocarp.—Collected in flower and fruit by Miss Sadie F. Price, in rocky woods, Bowling Green, Warren county, southern Kentucky. The type specimens are in the Gray Herbarium.

Miss Price reports that the species often fails to set fruit. She has observed that the flowers are visited by the butterfly *Eudamus tityrus* and by both honey bees and bumble bees, the latter appearing to find the nectaries very difficult of access. The accompanying illustration was drawn from life by Miss Price. It is a pleasure to commemorate in the specific name of this noteworthy plant the work of such a careful observer of the Kentucky flora.

The genus *Apios* furnishes still another instance of discrepancy between the theory and practice of the Rochester reformers. The generic name *Apios*, occasionally employed in prelinnaean times, was not used by Linnæus himself, but was revived late in the 18th century. In the meantime, however, Adanson founded his genus *Bradlea* (*Familles des Plantes* 2: 324. 1763), which, as he himself states (p. 527), included the first two species of the Linnæan *Glycine*, namely *G. Apios* (now of the genus *Apios*) and *G. frutescens* (referred by the reformers to *Kraunhia*). The former species, cited first by Adanson and resting on a plate of Cornuti, duly mentioned in Adanson's brief description, must be taken as the type of *Bradlea*. But whether *Bradlea* stands for

its *Apios* element, or its *Wistaria* element, it is equally evident that the genus long antedates both *Apios* Moench. and *Kraunhia* Raf., which the reformers keep up for these two elements respectively. *Bradlea* is not obscure enough to be overlooked, since it is published in Adanson's well-known work from which the reformers have derived so many of their names. It is also duly cited as a synonym of *Apios* by such works as Pfeiffer's *Nomenclator* and Hooker and Jackson's *Index Kewensis*. It does not appear to be antedated by any homonym, and it is truly puzzling to see why it has been rejected by those who, as they claim, admit no exception to the law of priority. However, its revival at present would be worse than useless, until the value of the fifty-year limit, suggested by the leading German botanists, can be subjected to a careful test. Mention of *Bradlea* is here made merely to show how little finality the advocates of the Rochester nomenclature have been able to obtain even when dealing with such a well-known genus as *Apios*.—B. L. ROBINSON, *Gray Herbarium*.

A CONTRIBUTION TO THE KNOWLEDGE OF THE FLORA OF TUSCOLA COUNTY, MICHIGAN.¹

DURING the summer of 1897, while engaged in field work for the Michigan Geological Survey, in that part of Tuscola county which lies adjacent to the eastern shore of Saginaw bay, the writer found what proved from the botanical standpoint an extremely interesting tract of country. This was a narrow, irregular strip of land somewhat back from the bay shore, known locally as the "prairie," which was rarely more than two or three miles in width, frequently much less, and at no very distant time had been a part of the bottom of the bay.

As the geological history of this tract has a clearly defined bearing upon the distribution of the plants which grow upon it, and as it is plainly set forth in easily read records, I will briefly trace it.

The bay off this shore is, and apparently always has been, very shallow. There are areas of the bottom also in which there are broad sand bars. These bars are often of considerable extent, but are still beneath the surface, and are only a few feet higher than the rest of the bottom. After a time one of these bars, in a part of the bay more exposed to the action of waves, is built up until its top is raised above

¹ Read before the Michigan Academy of Science, March 31, 1898.